

What is claimed is:

1. A laser welding head-controlling system comprising:
a laser irradiating body with a laser inlet and a laser outlet,
plural semiconductor lasers to oscillate plural linear laser beams for
measuring a welding state,
a CCD camera with a band-pass filter therein to pass through only the
reflected linear laser beams to take in, as an image, the measured welding
state by the reflected linear laser beams, and
an image processor to process the image of the measured welding state.
2. A laser welding head comprising a laser welding head-controlling
system as defined in claim 1, a laser oscillator to oscillate a laser for welding
and a condenser to converge the oscillated laser.
3. A method for controlling a laser welding head comprising the steps
of:
irradiating plural linear laser beams for parts to be welded of members
to be welded to measure a welding state from plural semiconductor lasers,
taking, as an image, the measured welding state by the reflected linear
laser beams into a CCD camera,
processing the image of the measured welding state, and
controlling a laser welding head based on the processed data of the
image.
4. A method for controlling a laser welding head as defined in claim
3, wherein the laser welding head is controlled by the CAD data of the parts
to be welded.
5. A method for controlling a laser welding head as defined in claim
3 or 4, further comprising the step of monitoring welding defects of the parts
to be welded based on the processed data and the CAD data.